UNITED STATES DEPARTMENT of the INTERIOR

FISH AND WILDLIFE SERVICE Bureau of Sport Fisheries and Wildlife Evans - 343-5634

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PESTICIDES RESIDUES FOUND IN WHOOPING CRANES

Pesticide residues have been found in the remains of three whooping cranes and in the contents of two whooping crane eggs, the Department of the Interior announced today. There was no evidence to show that the residues caused harmful effects.

The Department said the residues were found in relatively low amounts in all of the material examined in a special project at Wildlife Research Centers at Patuxent, Maryland, and Denver, Colorado.

The studies were carried out by Interior's Bureau of Sport Fisheries and Wildlife to determine whether pesticide residues were present in the extremely rare species. At the last count there were only 32 surviving wild whooping cranes.

Bureau scientists examined the remains of a young crane that died of unknown causes at the Aransas National Wildlife Refuge, Texas, in late 1963, the reamins of two chicks hatched early this year at Lafayette, Louisiana, and contents of two whooping crane eggs furnished by the Audubon Park Zoo in New Orleans.

The remains of the young wild crane found at Aransas showed residues of DDT and its degradation or "break-down" products well under one part per million. A trace of dieldrin was found in the bones.

The two whooping crane chicks had been hatched by bantam hens from eggs furnished by the Audubon Park Zoo. One chick died after two days, apparently from defects associated with premature hatching. The second died 18 days after hatching. An autopsy showed the cause of death was a massive hemorrage in the right thigh, apparently the result of a congenital deformity of the hip joint.

The analyses showed the presence of minute amounts of DDT, DDD--a degradation product of DDT--dieldrin and heptachlor-spoxide in both chicks. Higher amounts of another DDT degradation product--DDE--were found in the chicks. There were 4.2 parts per million of DDE in the liver of one bird but only .6 PPM in the liver of the second.

The highest residue--120 parts per million of DDE--was found in the fat of the second chick. No fat samples from the first chick were available for analysis.

The two eggs examined were among 10 laid by the captive whooping crane, Josephine, at the Audubon Park Zoo. After incubation, all of the eggs were found to be infertile.

These analyses, carried out at the Denver Center, showed that both eggs contained more than two parts per million of DDT and its break-down products.

One of the eggs also contained endrin, dieldrin, aldrin and heptachlor. The other egg contained the same compounds except aldrin but also had a trace of heptachlor-epoxide.

The Denver studies also revealed the presence of pesticide residues in food normally fed to the parent birds.

The Bureau said its research has not yet produced conclusive evidence of the effects of pesticide residues on the hatchability of eggs and the survival of young birds. Studies are in progress to determine these effects.

The report listed amounts of DDT and related compounds found in eggs in the wild of these other species of birds, in parts per million:

Bald eagle, from 1.1 to 36.9; golden eagle, .1 to 3; peregrine falcon, 12.4; grebe, 5.9; heron, 6.7; osprey, 3.5 to 48; black ducks, trace to 22.4; pheasants, 23 to 58.5; mallards, 4.8 to 18.7; and bobwhite, 10.7.

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